

ET150396423 v5

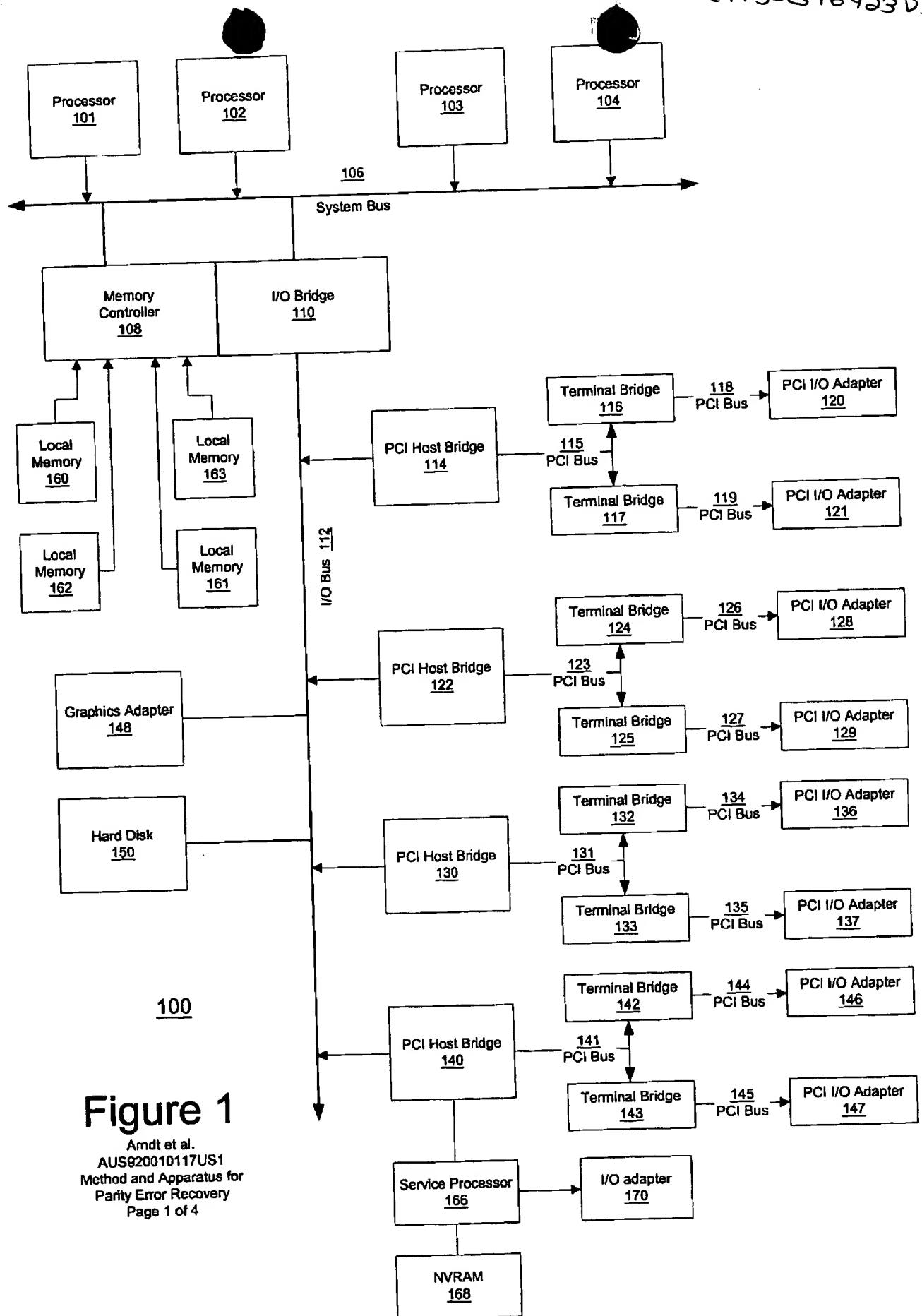


Figure 1

Arndt et al.
AUS920010117US1
Method and Apparatus for
Parity Error Recovery
Page 1 of 4

FIG. 1 is a block diagram of a system architecture.

Figure 2

Amdt et al.
AUS920010117US1
Method and Apparatus for
Parity Error Recovery
Page 2 of 4

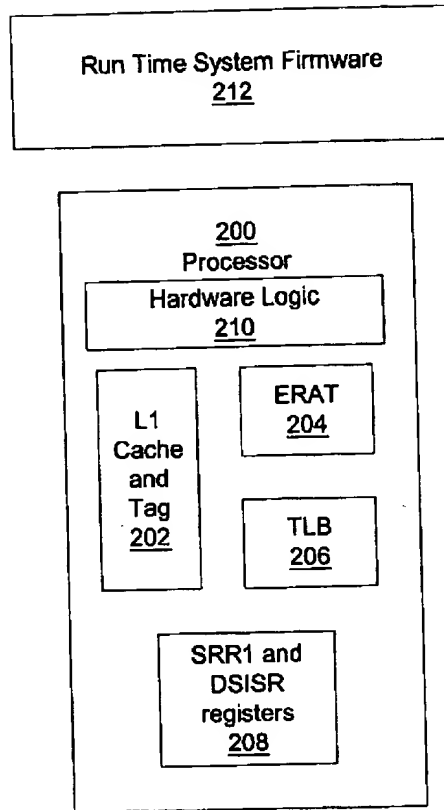


FIG. 2

Figure 3

Arndt et al.
AUS920010117US1
Method and Apparatus for
Parity Error Recovery
Page 3 of 4

	302	304	306	308	310
	Error Description	Hardware Indication	Firmware Recovery	Log Return Severity	Log Return RTAS Disposition
312	- Lost HW states	SRR1[RI]=0	None	Fatal (error not synchronous to current context)	Not Recovered
318	- D-cache parity - D-cache tag parity Under threshold	SRR1[RI] = 1 & SRR1[43] = 1 & DSISR[18 / 19] = 1	Invalidate D-cache	Warning	Fully Recovered
320	- D-cache parity - D-cache tag parity Over threshold	same as above	- Invalidate D-cache - Disable failing portion of D-cache	Warning	Fully Recovered
322	- L/S TLB parity - L/S D-ERAT parity Under threshold	SRR1[RI] = 1 & SRR1[43] = 1 & DSISR[20 / 21] = 1	Invalidate TLB all	Warning	Fully Recovered
314	- L/S TLB parity - L/S D-ERAT parity Over threshold	same as above	Invalidate TLB all, disable failing portion of ERAT or TLB	Warning	Fully Recovered
324	- Ifetch TLB parity Under threshold	SRR1[RI] = 1 & SRR1[44:45] = 10	Invalidate TLB all	Warning	Fully Recovered
316	- Ifetch TLB parity Over threshold	same as above	Invalidate TLB all, disable failing portion of TLB	Warning	Fully Recovered

300

FIG. 3 is a table for error recovery.

Figure 4

Arndt et al.
AUS920010117US1
Method and Apparatus for
Parity Error Recovery
Page 4 of 4

FIG. 4 is a flowchart of the parity error recovery method.

